

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of sending data packets in an access network or satellite infrastructure network supporting virtual sub-networks such as ~~IP logical sub-networks, private networks, or multi-recipient groups, sub-networks,~~ combining different terminal stations of the ~~network,~~ network and being allocated one or more labels, in which method a data packet is associated with an addressing header and each terminal station of the network is associated with a satellite terminal or a ground station located in the coverage of a particular spot of a particular satellite,

wherein the addressing header of the data packet further contains a “label” field containing ~~an identifier characteristic of a label allocated to one~~ virtual sub-network to which a target terminal station, to which the packet is addressed, belongs and characteristic of at least one spot associated with the ~~identifier,~~ label, said at least one spot including the spot in which the satellite terminal or the ground station, with which said target terminal station is associated, is located,

wherein at least one satellite uses the ~~identifier~~ label contained in the header of the data packet to transmit the data packet to the at least one spot associated with said ~~identifier,~~ label, and

wherein a satellite terminal or ground station located in said at least one spot has a list of authorized ~~identifiers~~ labels used as a reception filter, so that the satellite terminal or ground

station processes the data packet only if the ~~identifier-label~~ contained in the header of the data packet is in the list of authorized ~~identifiers-labels~~ of said satellite terminal or ground station.

2. (original): A method according to claim 1, wherein data packets are sent with no connection between the sending satellite terminal or the sending ground station and the receiving satellite terminal or the receiving ground station.

3. (original): A method according to claim 1, wherein the terminal stations of the network connected to the satellite terminals or to the ground stations consist of user terminals, routers, and data or service servers, in particular address resolution protocol servers.

4.-7. (canceled).

8. (original): A method according to claim 1, wherein the data packets are containers adapted to contain, among other things, IP packets, i.e. packets conforming to the standards for transfer of data in non-connected mode over Internet Protocol networks.

9. - 17. (canceled).

18. (currently amended): A satellite telecommunications system for implementing the method according to claim 1, the system including:

at least one satellite terminal having a table for each Internet service provider with which are associated user terminals connected to satellite terminals, said table establishing the relationship between target user terminal addresses and the ~~identifiers-labels~~ associated with them, and the satellite terminal listening to receiving ~~identifiers-labels~~ of sub-networks to which the user terminals associated with it belong,

at least one Internet service provider associated with a label server adapted to supply an addressing ~~identifier-label~~ as a function of a target terminal station address of a data packet, and

at least one satellite having access to a table establishing the relationship between ~~identifiers-labels~~ allocated to sub-networks and the spots of its satellite system, and means for sending a data packet associated with a given ~~identifier-label~~ only in the spot or spots linked to said ~~identifier-label~~,

wherein the satellite terminal has the list of authorized ~~identifiers-labels~~ used as the reception filter, so that the satellite terminal processes the data packet only if the ~~identifier-label~~ contained in the header of the data packet is in the list of authorized ~~identifiers-labels~~ of said satellite terminal.

19. (canceled).

20. (previously presented): A method according to claim 1, wherein said particular satellite has plural spot beams.

21. (previously presented): A method according to claim 1, wherein the label in each header is selected from a set of plural labels each representing a different combination of subnetwork and at least one satellite spot.

22. (previously presented): A method according to claim 1, wherein the headers of at least some data packets destined for terminals in the same subnetwork but in different satellite spots will contain different labels.

23. (previously presented): The method according to claim 1, wherein each sub-network has a different Internet service provider.

24. (previously presented): The method according to claim 1, wherein the processing of the data packet by the satellite terminal or ground station comprises extracting the address of the target terminal station and sending the data packet to the target terminal station.

25. (previously presented): The method according to claim 1, wherein each sub-network is a virtual sub-network.

26. (previously presented): The satellite telecommunications system according to claim 18, wherein the satellite terminal stores the sending label of the ground station with which it is associated, by means of which label it can send broadcast data packets to said ground station.

27. (previously presented): A satellite telecommunications system according to claim 18, wherein a terminal station and said satellite terminal constitute one and the same equipment unit and are combined in the same device.

28. (previously presented): A satellite telecommunications system according to claim 18, wherein the terminal station is a user terminal which, with said satellite terminal, constitutes one and the same equipment unit.

29. (currently amended): A satellite telecommunications system according to claim 18, wherein the satellite contains said table establishing the relationship between ~~identifiers~~labels allocated to sub-networks and the spots of its satellite system.

30. (currently amended): A satellite telecommunications system according to claim 18, wherein the table establishing the relationship between ~~identifiers~~labels allocated to sub-networks and the spots of its satellite system is contained in a network control center.

31. (new): A method of sending data in a satellite network supporting virtual sub-networks combining different terminal stations of the network, the method comprising the steps of:

installing a centralized label determination server in an Internet service provider, which uses the satellite network,

communicating a label (Label_SARPI) corresponding to said label determination server to a satellite terminal or a ground station of the network, said label being characteristic of a spot in which the label determination server is located,

providing to said satellite terminal or to said ground station data to be sent to a target terminal station having an IP address,

having the satellite terminal or the ground station send to the label determination server of its Internet service provider, using the label (Label_SARPI) corresponding to the label determination server, a "Label request" data packet containing the IP address of the target terminal station,

having the label determination server determine a label characteristic of one virtual sub-network to which the target terminal station belongs and characteristic of at least one spot associated with the label, said at least one spot including the spot in which a satellite terminal or the ground station with which said target terminal station is associated is located,

having the label determination server send to the satellite terminal or to the sending ground station, using a label characteristic of at least one spot in which said sender is located, a

"Label response" data packet containing the label (Label_n) determined by the label determination server, and

sending in the satellite network at least one data packet comprising the data to be sent and associated with an addressing header, which includes said label determined by the label determination server,

wherein at least one satellite uses the label contained in the header of the data packet to transmit the data packet to the at least one spot associated with said label, and

wherein a satellite terminal or ground station located in said at least one spot has a list of authorized labels used as a reception filter, so that the satellite terminal or ground station processes the data packet only if the label contained in the header of the data packet is in the list of authorized labels of said satellite terminal or ground station.